ABSTRACT OF THE DISCLOSURE

Genes for familial hemeplegic migraine (FHM), episodic ataxia type-2 (EA-2), common forms of migraine, and other episodic neurological disorders, such as epilepsy, have been mapped to chromosome 19p13. A brain-specific P/Q type calcium channel subunit gene, covering 300 kb with 47 exons is provided. The exons and their surroundings reveal polymorphic variations and deleterious mutations that are linked to various types of cation channel dysfunctions causing episodic neurological disorders in man or animals.